

WHAT IS CLAIMED IS:

1. An airsleeve comprising an elastomeric liner; a reinforcing layer overlaying the liner; and an elastomeric cover overlaying the reinforcing layer; the reinforcing layer comprising: i) textile fibers having distributed over surface portions thereof an RFL adhesive; and ii) a plycoat formed from a rubber composition comprising: 100 parts by weight of at least one diene-based elastomer selected from natural rubber (NR), synthetic polyisoprene rubber (IR), butadiene rubber (BR) and styrene-butadiene rubber (SBR); from about 1 to about 40 parts by weight of a metal salt of an α , β - ethylenically unsaturated carboxylic acid, and from about 0.2 to about 5 parts by weight of an organic peroxide.
2. The airsleeve of claim 1, wherein the cover comprises at least one rubber selected from epichlorohydrin rubber (ECO), brominated butyl rubber (BIIR) and chlorinated butyl rubber (CIIR).
3. The airsleeve of claim 1, wherein the liner comprises at least one rubber selected from epichlorohydrin rubber (ECO), brominated butyl rubber (BIIR) and chlorinated butyl rubber (CIIR).
4. The airsleeve of claim 1, wherein the plycoat rubber composition comprises from about 5 to about 20 parts by weight of a metal salt of an α , β - ethylenically unsaturated carboxylic acid.
5. The airsleeve of claim 1, wherein the plycoat rubber composition comprises from 0.3 to 3 parts by weight of an organic peroxide.
6. The airsleeve of claim 1, wherein the plycoat rubber composition comprising 50 to 95 parts by weight of natural rubber and 5 to 50 parts by weight of a rubber selected from synthetic polyisoprene, butadiene rubber and styrene-butadiene rubber.

7. The airsleeve of claim 1, wherein said textile fibers are selected from the group consisting of woven fabrics, knitted fabric, or spun bonded fabric, and fiber cord.

8. The airsleeve of claim 1, wherein said textile fibers comprises a material
5 selected from the group consisting of rayon, nylon, polyester, aramid, cotton, and combinations thereof.

9. The airsleeve of claim 1, wherein textile fibers comprises nylon.

10 10. The airsleeve of claim 1 wherein said airsleeve is a component of a manufactured item selected from shock absorbers, struts, truck cab suspension springs, truck driver seat springs, automobile air springs, and industrial air springs.

11. An air spring comprising the airsleeve of claim 1.

15 12. The airsleeve of claim 1, wherein said RFL comprises resorcinol, formaldehyde, and at least one polymer selected from styrene-butadiene copolymer and vinylpyridene-styrene-butadiene terpolymer.

20 13. An air spring comprising the airsleeve of claim 1, wherein the air spring is a bellows type air spring.

14. An air spring comprising the airsleeve of claim 1, wherein the airspring is a rolling lobe air spring.

25 15. The airsleeve of claim 1, wherein the rubber composition comprises 50 to 100 parts by weight of natural rubber (NR), 0 to 50 parts by weight of synthetic polyisoprene rubber (IR) or butadiene rubber (BR); from about 5 to about 20 parts by weight of a metal salt of an α , β - ethylenically unsaturated carboxylic acid, and from 30 about 0.3 to about 1.5 parts by weight of an organic peroxide.

16. The airsleeve of claim 1, wherein the rubber composition further comprises from about 30 to about 60 parts by weight of a filler selected from carbon black and silica.

5 17. The airsleeve of claim 15, wherein the rubber composition further comprises from about 30 to about 60 parts by weight of a filler selected from carbon black and silica.

10 18. An airsleeve comprising:
an elastomeric liner;
a reinforcing layer overlaying the liner;
and an elastomeric cover overlaying the reinforcing layer;
the reinforcing layer comprising:
15 i) textile fibers having distributed over surface portions thereof
an RFL adhesive; and
ii) a plycoat formed from a rubber composition comprising:
50 to 100 parts by weight of natural rubber (NR);
0 to 50 parts by weight of synthetic polyisoprene rubber
(IR) or butadiene rubber (BR);
20 from about 5 to about 20 parts by weight of a metal salt
of an α, β - ethylenically unsaturated carboxylic acid;
from about 0.2 to about 5 parts by weight of an organic
peroxide;
from about 30 to about 60 parts by weight of a filler
25 selected from carbon black and silica;
the cover comprising epichlorohydrin rubber (ECO) and optionally
chlorinated butyl rubber (CIIR).

30 19. The airsleeve of claim 1, wherein the metal salt of an α, β - ethylenically unsaturated carboxylic acid is selected from the group consisting of zinc diacrylate and zinc dimethacrylate.

20. The airsleeve of claim 1, wherein the organic peroxide is selected from include dicumyl peroxide, n-butyl-4,4-di(t-butylperoxy) valerate, 1,1-di(t-butylperoxy)-3,3,5-trimethylcyclohexane, 1,1-di(t-butylperoxy) cyclohexane, 1,1-di(t-amylperoxy) cyclohexane, ethyl-3,3-di(t-butylperoxy) butyrate, ethyl-3,3-di(t-amylperoxy) butyrate,
5 2,5-dimethyl-2,5-di(t-butylperoxy) hexane, t-butyl cumyl peroxide, $\alpha\alpha'$ -bis(t-butylperoxy)diisopropylbenzene, di-t-butyl peroxide, 2,5-dimethyl-2,5-di(t-butylperoxy) hexyne-3, t-butyl perbenzoate, 4-methyl-4-t-butylperoxy-2-pentanone and mixtures thereof.